April 20th, 2010

Question & Answers Middle School Pilot

Presenter: Marty Thompson, CTE Director & Dean of the Advanced Technology Complex Denton ISD

#### "Begin with the End in Mind"

- Information on CTE options in the middle schools
  - Traditional middle schools across the state offer academic courses and an array of electives in fine arts, band, athletics, PE & CTE
  - Student who need extra support in passing the TAKS are placed in a support class in place of elective
- Denton ISD Middle School Pilot Update (Year 2 of 4)
  - Teacher training to meet high school expectations
    - Additional certifications
    - Training with Career Counselors
    - Regional training
  - Purchase of advanced learning tools for high school credit courses and innovative course shared between gifted & talented and technology application (Alternative Energy, Robotics, Gaming Design, Web Design, 3 Dimensional Design/Modeling) Upcoming: Space & Aviation, Global Information Systems "Focus on innovation, collaboration, critical thinking and problem solving
  - Creation of three start points for entering career cluster pathways
  - Developed high school credit options
  - Created a counseling placement notebook to assign in ARD meetings
  - Trained middle school counselors
  - Promotional/Marketing
    - Parent transition meetings
    - Video of students encouraging the importance of prep for high school success
    - Career Educational Models (6<sup>th</sup> grade through university degree)
    - Computer4Kids (5<sup>th</sup> grade) Community Outreach
    - Tours of the Advanced Technology Complex with emphasis on academic skills needed to enter
- Performance Data
  - 40% (1,400) of students have taken advanced of earning advanced high school credit during the past two years

1504 LONG RD DENTON TX, 76207

- Innovative course that bridges between gifted/talented and technology resulted in a 2<sup>nd</sup> place win in robotics "Focus on innovation, collaboration, critical thinking and problem solving"
- Tours of the ATC have been a big influence not only on students, but middle school instructors, administrators and parents
- Participating students will be monitored during high school and compared to test group of students who did not take advantage of advanced level courses: attendance, grade average & on line for graduation
- Parent comment: "My son has decided he wants to be an Engineer and is using your educational model for planning his high school and beyond"
- o Parent comment: "I did not know that Denton ISD had so much to offer"
- o \$35,000 funds expended to date
- PBMAS data reflects a 2/10 of 1 percent dropout rate for advanced CTE students
- Advanced CTE students TAKS performance meets or exceeds average high school scores
- Students who earn high school credit early will reduce 9<sup>th</sup> grade retention, increase attendance, motivate students and inspire success planning

#### Upcoming:

- Redo all Educational Models to meet new TEA course changes
- Continue to update STEM labs
- Offer innovative pilot to other middle school campuses
- Create competitive STEM event at ATC for middle school students

#### Recommendation from the field

- Middle school is a critical indicator for high school success and dropout prevention
- o Alignment by clusters are easy to understand by students & community
  - Education Models brings it all together and validates the importance of academic and preparation for the future
- The new requirement of fine arts has limited student access to technology
- Students can only select one elective field
- All eight grade students should be <u>required</u> to take a course in career planning & use of basic software application
  - Good career counseling does not happen in a one hour presentation
- Middle school grant funding should not be mixed in with high school ADA dollars
- o Funding should clearly "spell out" how it can be spent
- Tiered funding reduces significantly the dollars a school district allows to be budgeted since tier 1 funding amounts to approximately 12%

**DENTON TX, 76207** 

 A school district accountability should reflect documentation of support beyond salaries

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## Middle School

apportunity to enter high school with early credit, personal planning The middle school sequence is utilized to provide students the and/or an understanding higher educational requirements.

Elective Whee

**Exploring Careers** (1-2 SEM) [7-8] Investigation) (was Career

and/

& Tourism 7-8 (.5-1) (HS **Principles of Hospitality** (was Prep-ATC or Career Connections)

**Technology Education)** 

(ie. Construction or

Services 7-8 (.5-1) (HS) Family & Community (was Skills for Living)

### Personal Services Prep

**Business-Related Prep** 

High School Clusters

Information Technology

(.5-1)[7-8]

**Principles of** 

Entry (.5-1) [7-8] (HS)

(was Keyboarding)/

Touch Systems Data

#### High School Clusters

**Undeclared Career Goal** Hospitality & Tourism **Education & Training Human Services Health Science** 

Law, Public Safety, & Security Gov't & Public Administration

Finance

Marketing

Business Management &

Arts, A/V, Technology &

Communication Administration

> (1-2 SEM) [7-8] Specialization Career Portal

Transportation 8 (1) (HS) approval required by CTE & innovative course currently (was Advanced Tech Edtaught at NAVO only; Energy, Power, & **GT** director)

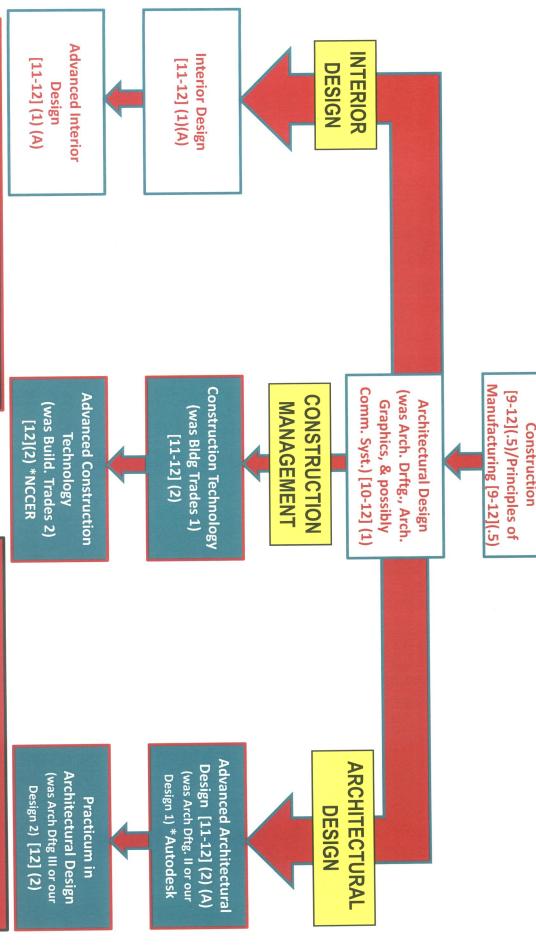
### Applied Technology Prep

#### **High School Clusters**

Transportation, Distribution & Engineering & Math (STEM) **Architecture & Construction** Agriculture, Food, & Natural Science, Technology Manufacturing Logisticsw Resources

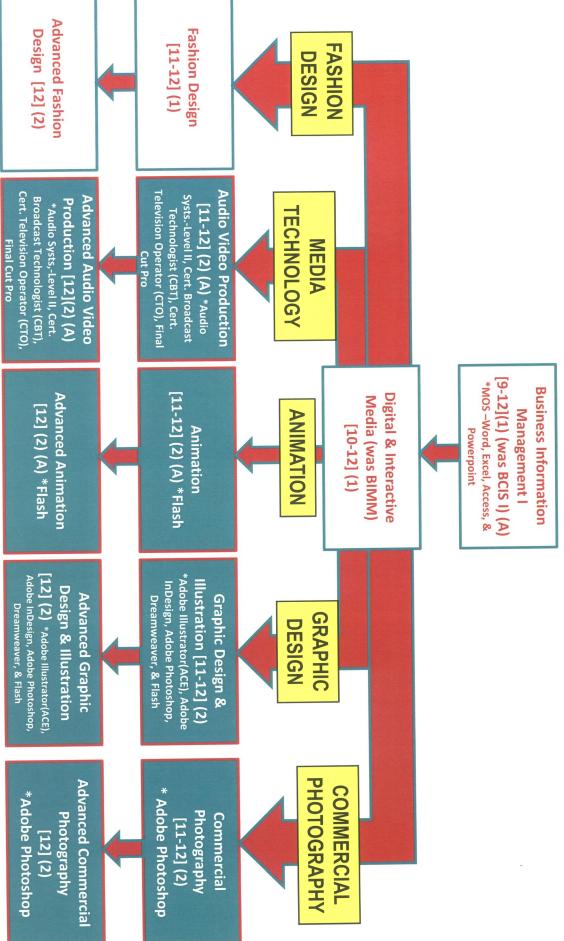
# Architecture and Construction

Principles of Architecture and



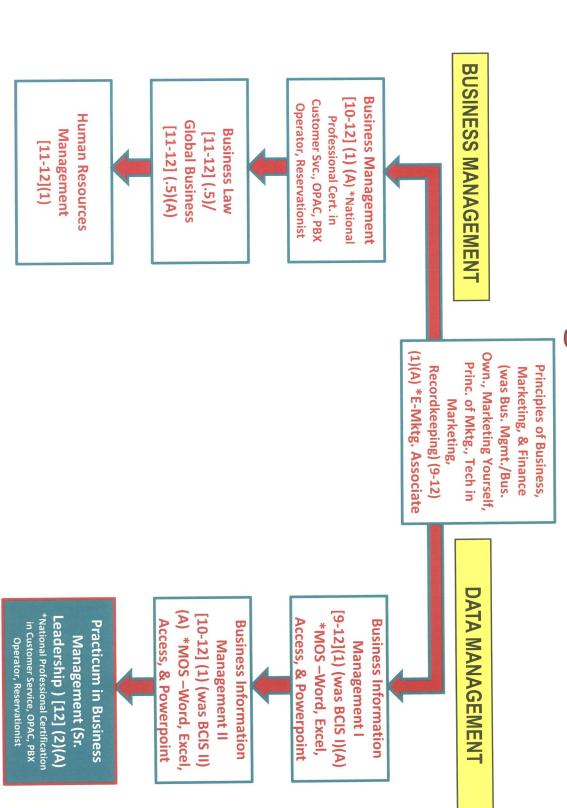
University Experience Practicum (2) (A) is a Senior level college-prep course and can complement any sequence.

# Arts, A/V Technology & Communication



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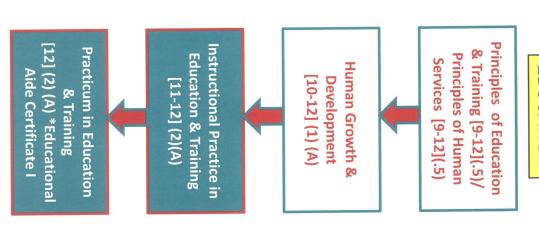
# Business Management & Administration

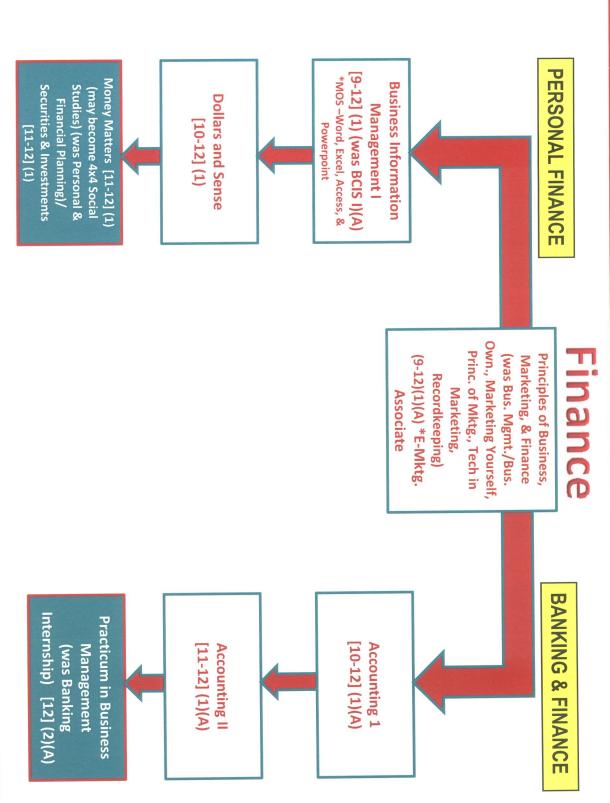


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## **Education & Training**

#### **EDUCATION**





University Experience Practicum (2) (A) is a Senior level college-prep course and can complement any sequence.

#### **PRE-VETERINARY**

/Medical Terminology **Principles of Health** Science [9-12] (.5) [9-12] (.5) (A)

Small Animal Mgmt. **Equine Science** [10-12] (.5)

[10-12] (.5) (A)

Science [11] (1) (A) **Advanced Animal** 

### Health Science

[9-12] (1) (was BCIS I)(A) \*MOS –Word, Excel, Access, & **Business Information** Management I Powerpoint

/Medical Terminology **Principles of Health** Science [9-12] (.5) [9-12] (.5) (A)

**Health Science** [11-12] (2)(A) (was HSTE II)

**VOCATIONAL NURSE** PRE-LICENSED

CLINICAL SPECIALIZATION **ADVANCED** 

**TECHNICIAN PHARMACY** 

> **CERTIFIED NURSING ASSISTANT**

[12] (2)  $^*$  Certified Veterinary Science- Pre-Veterinary Medicine (was HSTE III) **Practicum in Health** 

Science -Pre-LVN(was \*Licensed Vocationa Practicum in Health HSTE III) [12] (2)(A) Nurse

(was HSTE III) [12] (2) Science-Job Shadow **Practicum in Health** \*Advanced Clinical Specialization

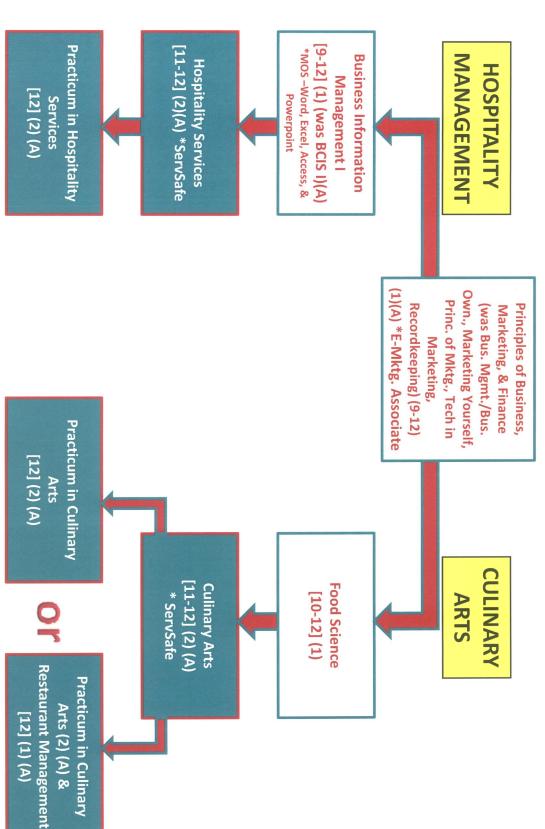
Technician (was HSTE III) **Practicum in Health** Science-Pharmacy [12] (2)(A) \*CPHT

Science -CNA(was HSTE III) [12] (2)(A) \*Certified **Practicum in Health Nursing Aide** 

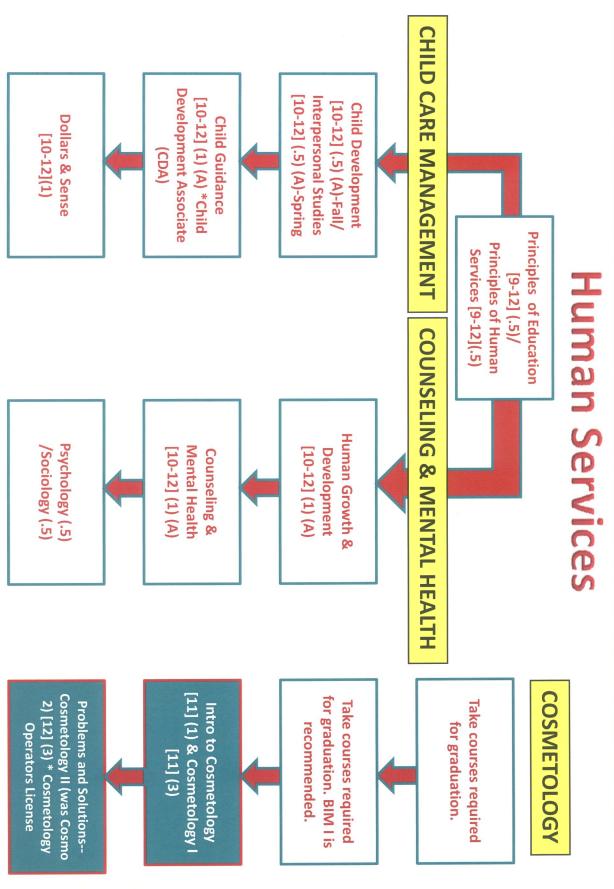
college-prep course and can complement any sequence. University Experience Practicum (2) (A) is a Senior level

Each CTE sequence provides opportunity for students to earn ege tech prep credits

# **Hospitality & Tourism**

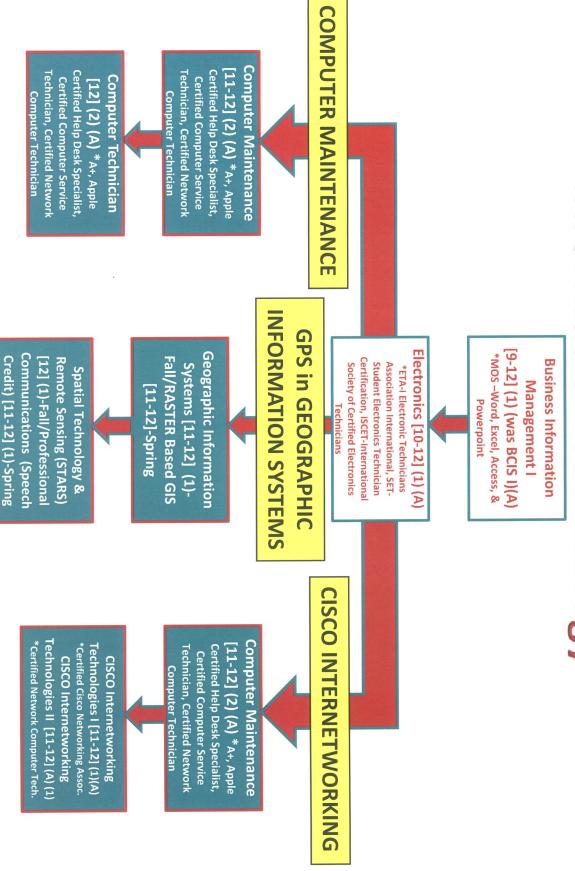


University Experience Practicum (2) (A) is a Senior level college-prep course and can complement any sequence.

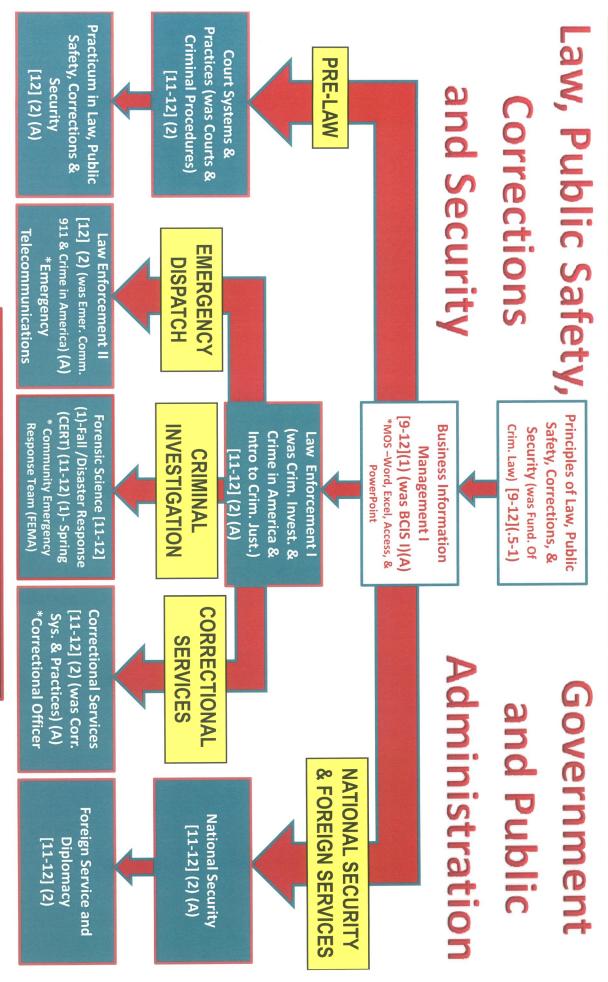


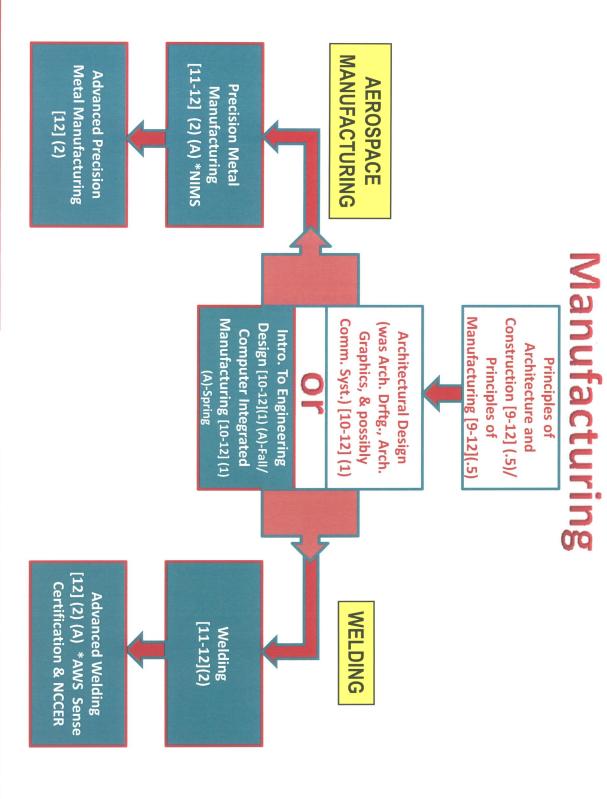
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# Information Technology



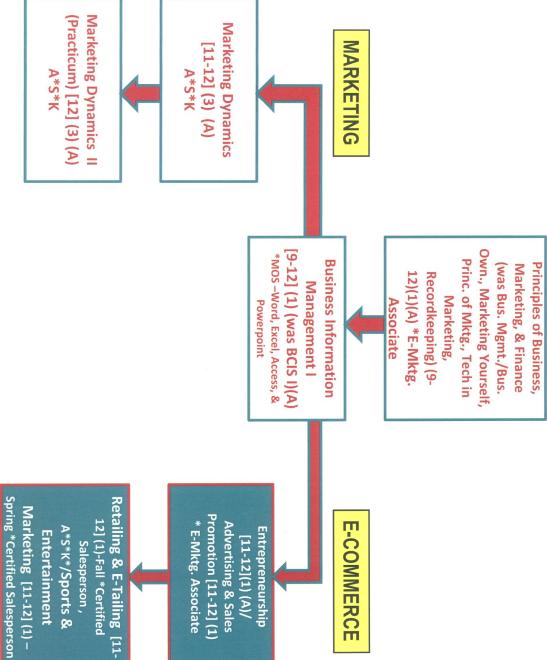
University Experience Practicum (2) (A) is a collegeprep course and can complement any sequence.





University Experience Practicum (2) (A) is a Senior level college-prep course and can complement any sequence.

### Marketing



# ocience, Technology, Engineering and

Mathematics (STEM)

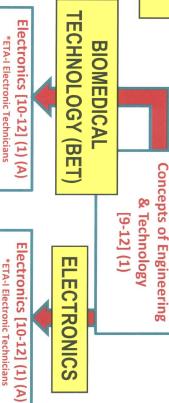


Manufacturing [9-12](.5) Construction [9-12] (.5)/ (was Arch. Drftg., Arch **Architectural Design** Architecture and **Principles of** Principles of

Comm. Syst.) [10-12](1) **Engineering Graphics) Engineering Design &** Graphics, & possibly Presentation (was

[11-12] (1)(A) \*Autodesk

**Problems & Solutions in** Engineering [12] (1) Architectural



Certification, ISCET-International Association International, SET-Society of Certified Electronics **Student Electronics Technician** 

Certification, ISCET-International

Society of Certified Electronics **Student Electronics Technician** Association International, SET-

**Advanced Electronics** [11-12] (2) (A)

**Advanced Electronics** 

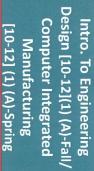
Biomedical Technology **Practicum in STEM-**[12] (2)

Practicum in STEM -[11-12] (2) (A) Electronics [12] (2)

college-prep course and/or can complement any sequence. University Experience Practicum (2) (A) is a Senior level

#### (Project Lead the Way) **ENGINEERING**

take a Technology App. for graduation. Do not Take courses required

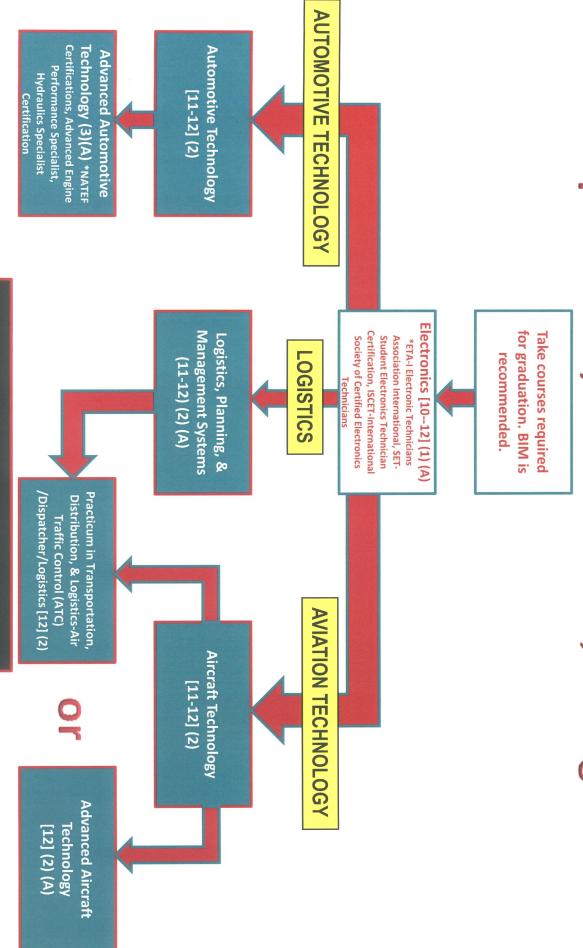


**Principles of Engineering** Civil Engineering and [11-12] (1)(A)-Spring [11-12](1)-Fall, Architecture



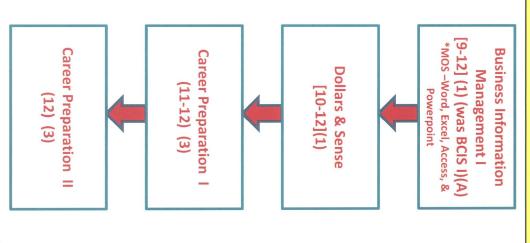
**Engineering Design & Digital Electronics** [12] (1) (A)-Fall / Development [12] (1)-Spring

# Transportation, Distribution, & Logistics

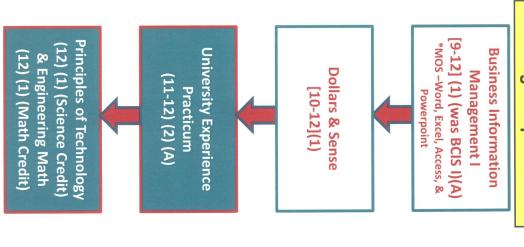


## Clueless Cluster

### Paid Employment Program: Entry Level Work Preparation



### Undeclared Career Goal: College Preparation



# 1 Year College & Career Readiness Fast Track

(was Arch Dftg. II or our **Advanced Architectural** Design 1) \*Autodesk Design (2) (A)

**Agricultural Mechanics** & Metal Technologies (A) (1) \*NCCER

(2) (A) \*Flash Animation

**Audio Video Production** (CBT), Cert. Television Operator (2) (A) \*Audio Systs,-Level II, Cert. Broadcast Technologist

(CTO), Final Cut Pro

**Business Information** Access, & Powerpoint \*MOS –Word, Excel, (was BCIS I) (1) (A) Management I

**Business Management** (1) (A) \*National

Customer Svc., OPAC, PBX Operator, Reservationist **Professional Cert. in** 

> Child Guidance (1) (A) \*Child Development Associate (CDA)

**CISCO Internetworking** 

(1) \*Certified CISCO

Networking Associate/I

(1) \*Certified Network **Computer Technician** 

**Computer Maintenance** 

**Help Desk Specialist, Certified** Computer Service Technician, (2) (A) \*A+, Apple Certified Certified Network Computer Technician, Cisco

**Correctional Services** 

(2) (was Corr. Systs. & Practices) (A)

\*Correctional Officer

/Sports & Entertainment (1) \*E-Mktg. Associate Retailing & E-Tailing Marketing (1)

Intrnational, SET-Student Elecronics **Electronic Technicians Association** Electronics (2) (A) \*ETA-Technician Certification, ISCET-**Electronics Technicians** 

> **Graphic Design &** Illustration

(2) \*Adobe Illustrator(ACE), Dreamweaver, & Flash Adobe Photoshop, Adobe InDesign,

Landscape Design & Turl **Grass Management (1)** 

**Tractor & Machinery Operation** \*Private Pesticide App., Safe **Texas Certified Nursery** Professional

911 & Crime in America (2) (was Emerg. Comm. **Telecommunications** Law Enforcement II (A) \*Emergency

**Teen Certification First** Responder

Manufacturing (A) **Precision Metal** \*NIMS

Science (was HSTE III) **Practicum in Health** (2)(A) CNA \*Certified **Nursing Aide** 

> Science (was HSTE III) Practicum in Health Technician \*СРНТ (2)(A) Pharmacy

**Principles & Elements of** \* Floral Certification Floral Design (1) (A)

**Principles of Technology** (1) (Science)

(1) \*Private Pesticide Management Applicator

Range Ecology &

**Electronics 1/** 

**Bio-Med Technology (A)** 

Career Preparation (3)

**University Experience** Practicum (2) (A)

These senior level fast track courses require the junior level prerequisite or committee approval. Selection is based on space availability and those who follow the sequence have priority.